

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of claims

Claim 1: (currently amended) A method for identifying mail pieces for special processing based upon a plurality of predetermined profiles characteristics, the method comprising the steps of:

a) selecting a plurality of profile image characteristics for each one of the plurality of predetermined profiles;

b) storing ~~[[a]]~~ the plurality of predetermined profiles, each of the predetermined profiles having values for the plurality of selected at least one profile image echaracteristic characteristics;

~~[[b)]]~~ c) obtaining at least one mail piece image echaracteristic characteristics associated with an image of a mail piece;

~~[[c)]]~~ d) retrieving one of the plurality of predetermined profiles that has not yet been used in a comparison;

~~[[d)]]~~ e) comparing the at least one mail piece image echaracteristic characteristics to the at least one profile image characteristic present in the one of the plurality of predetermined profiles;

~~[[e)]]~~ f) identifying the mail piece for special processing, if the at least one of the plurality of predetermined profiles profile image characteristic substantially matches the at least one mail piece image echaracteristic characteristics; and

~~[[f)]]~~ g) repeating steps [[c)]] d) through [[e)]] f) for another one of the plurality of predetermined profiles, if the at least one of the plurality of predetermined profiles profile image characteristic does not substantially match the at least one mail piece image echaracteristic characteristics.

Claim 2: (cancelled)

Claim 3: (currently amended) The method of claim 1 wherein the step of comparing the ~~at least one~~ mail piece image ~~characteristic characteristics~~ to the ~~at least one of the plurality of predetermined profiles~~ profile image characteristic occurs during real-time processing.

Claim 4: (currently amended) The method of claim 1 wherein the step of comparing the ~~at least one~~ mail piece image ~~characteristic characteristics~~ to the ~~at least one of the plurality of predetermined profiles~~ profile image characteristic occurs during offline processing.

Claim 5: (currently amended) The method of claim 1 wherein ~~the at least one mail piece image characteristic and the at least one profile image characteristic are~~ the plurality of predetermined profiles includes selected combinations of the plurality of profile image characteristics selected from the group consisting of barcodes, address styles, address resolution, envelope size, initiating processing and distribution center, addressee, postage characteristics, markings, and handwriting characteristics.

Claim 6: (currently amended) A system enabling identification of mail pieces based upon predetermined profiles characteristics, the system comprising:

~~means for obtaining a detector and optical elements configured to obtain~~ an image of a mail piece;

~~means for obtaining at least one mail piece image characteristic associated with the image of the mail piece;~~

at least one processor configured to obtain mail piece image characteristics associated with the image of the mail piece;

at least one computer readable memory having:

(a) a database storing data for each one of a plurality of predetermined profiles, the data comprising:

an identifier,

~~at least one a plurality of profile image characteristic characteristics and~~ associated values, and,

an action identifier configured to specify a plurality of actions associated with each of said plurality of predetermined profiles; and,

(b) computer readable code embodied in the at least one computer readable memory, the computer readable code ~~capable of causing~~ configured to cause the at least one processor to:

retrieve the data for one of the plurality of predetermined profiles from the database,

compare the ~~at least one mail piece image characteristic~~ characteristics to the ~~one of the plurality of predetermined profiles profile image characteristic~~ from the retrieved data,

identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved data, if the ~~at least one mail piece image characteristic~~ characteristics present in the retrieved data substantially ~~[[matches]]~~ match the one of the plurality of predetermined profiles profile image characteristic from the retrieved data.

Claim 7: (currently amended) The system of claim 6 wherein the computer readable code is further configured to cause ~~capable of causing~~ the at least one processor to:

retrieve ~~[[the]]~~ further data corresponding to another predetermined profile from the plurality of predetermined profiles from the database,

compare the ~~at least one mail piece image characteristic~~ characteristics for the image of the mail piece to the values for at least one of the plurality of predetermined profiles profile image characteristic from the retrieved further data, and

identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved further data, if the values for at least one of the plurality of predetermined profiles profile image characteristic from the retrieved data substantially matches the ~~at least one mail piece image characteristic~~ characteristics for the image of the mail piece.

Claim 8: (currently amended) The system of claim 6 further comprising:

~~means for communicating a network interface and a server configured to communicate with a~~
network.

Claim 9: (currently amended) The system of claim 8 further comprising:

~~a remote server capable of receiving and sending~~ configured to receive and send the data.

Claim 10: (currently amended) The system of claim 7 wherein ~~the at least one mail piece image characteristic and the at least one profile image characteristic are~~ the plurality of predetermined profiles include selected combinations of the plurality of profile image characteristics selected from the group consisting of barcodes, address styles, address resolution, envelope size, initiating processing and distribution center, addressee, postage characteristics, markings, and handwriting characteristics.

Claim 11: (currently amended) A system enabling identification of mail pieces based upon predetermined profiles characteristics, the system comprising:

~~means for obtaining a detector and optical elements configured to obtain an image of a mail~~
piece;

~~means for obtaining at least one mail piece image characteristic associated with the image of~~
the mail piece;

at least one processor configured to obtain mail piece image characteristics associated with
the image of the mail piece;

a first memory for storing data for access by a process executed by at least one processor, said
memory comprising:

a database storing data for each one of a plurality of predetermined profiles, the data
comprising:

an identifier,

~~at least one~~ values for a plurality of selected profile image characteristic
characteristics, and,

an action identifier configured to specify a plurality of actions associated with
each of said plurality of predetermined profiles;

at least one second memory having computer readable code embodied therein, the computer readable code configured to cause ~~capable of causing~~ the at least one processor to:

retrieve the data for one of the plurality of predetermined profiles from the database,

compare the ~~at least one~~ mail piece image ~~characteristic~~ characteristics to the ~~one of the plurality of predetermined profiles~~ profile image characteristic from the retrieved data,

identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved data, if the ~~at least one~~ mail piece image ~~characteristic~~ characteristics present in the retrieved data substantially ~~[[matches]]~~ match the ~~one of the plurality of predetermined profiles~~ profile image characteristic from the retrieved data.

Claim 12: (currently amended) The system of claim 11 wherein the computer readable code is further configured to cause ~~capable of causing~~ the at least one processor to:

retrieve ~~[[the]]~~ further data corresponding to another predetermined profile from the plurality of predetermined profiles from the database,

compare the ~~at least one~~ mail piece image ~~characteristic~~ characteristics for the image of the mail piece to the values for at least one of the plurality of predetermined profiles ~~profile image characteristic~~ from the retrieved further data, and

identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved further data, if the ~~at least one~~ of the plurality of predetermined profiles ~~profile image characteristic~~ from the retrieved data substantially matches the ~~at least one~~ mail piece image ~~characteristic~~ characteristics for the image of the mail piece.

Claim 13: (currently amended) The system of claim 11 further comprising:

~~means for communicating~~ a network interface and a server configured to communicate with a network.

Claim 14: (currently amended) The system of claim 13 further comprising:

a remote server ~~capable of receiving and sending~~ configured to receive and send the data.

Claim 15: (currently amended) The system of claim 11 wherein ~~the at least one mail piece image characteristic and the at least one profile image characteristic are~~ each of the plurality of predetermined profiles include selected combinations of the plurality of profile image characteristics selected from the group consisting of barcodes, address styles, address resolution, envelope size, initiating processing and distribution center, addressee, postage characteristics, markings, and handwriting characteristics.

Claim 16: (currently amended) The system of claim 14 wherein the remote server includes:

at least one third memory having computer readable code embodied therein, the computer readable code configured to cause ~~capable of causing~~ the at least one processor to:

retrieve the data for one of the plurality of predetermined profiles from the database,
compare the ~~at least one mail piece image characteristic~~ characteristics for the image of the mail piece to the values for at least one of the plurality of predetermined profiles profile image characteristic from the retrieved data, and
identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved data, if the ~~at least one of the plurality of predetermined profiles profile image characteristic~~ from the retrieved data substantially matches the ~~at least one mail piece image characteristic~~ characteristics for the image of the mail piece.

Claim 17: (currently amended) The system of claim 16 wherein the computer readable code is further configured to cause ~~capable of causing~~ the at least one processor to:

retrieve ~~[[the]]~~ further data corresponding to another predetermined profile from the plurality of predetermined profiles from the database,

compare the ~~at least one mail piece image characteristic~~ characteristics for the image of the mail piece to the ~~at least one of the plurality of predetermined profiles profile image characteristic~~ from the retrieved further data, and

identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by the action identifier from the retrieved further data, if the ~~at least one of the plurality of predetermined~~

~~profiles~~ profile image characteristic from the retrieved data substantially matches the ~~at least one mail piece image characteristic characteristics~~ for the image of the mail piece.

Claim 18: (currently amended) The system of claim 14 further comprising:

another memory for storing the data for access by a process executed by the remote server, said memory including a database.

Claim 19: (currently amended) The method of claim 1 wherein said step of comparing can be executed with a subset of the plurality of the predetermined profiles simultaneously, and wherein said step of identifying the mail piece for special processing can result from a match from any one of the plurality of the predetermined profiles. ~~the mail piece comprises a hand addressed mail piece;~~

~~wherein the at least one mail piece image characteristic comprises at least one handwriting characteristic; and,~~

~~wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for handwriting penned by one individual.~~

Claim 20: (currently amended) The system of claim 6 wherein said computer readable code is further configured to compare the mail piece image characteristics with a subset of the plurality of the predetermined profiles simultaneously, and wherein said computer readable code is further configured to identify the mail piece for special processing if there is a match from any one of the plurality of the predetermined profiles. ~~the mail piece comprises a hand addressed mail piece;~~

~~wherein the at least one mail piece image characteristic comprises at least one handwriting characteristic; and,~~

~~wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for handwriting penned by one individual.~~

Claim 21: (previously presented) The system of claim 11 wherein said computer readable code is further configured to compare the mail piece image characteristics with a subset of the plurality of the predetermined profiles simultaneously, and wherein said computer readable code is further

configured to identify the mail piece for special processing if there is a match from any one of the plurality of the predetermined profiles. ~~the mail piece comprises a hand-addressed mail piece;~~

~~wherein the at least one mail piece image characteristic comprises at least one handwriting characteristic; and,~~

~~wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for handwriting penned by one individual.~~

Claim 22: (currently amended) A system for processing mail items and identifying mail items for special processing comprising:

a transport sub-system configured to transport ~~capable of transporting~~ a mail item;

an imaging sub-system configured to obtain ~~capable of obtaining~~ an image of the mail piece;

~~means for storing~~ a database configured to store a plurality of predetermined profiles, each of the plurality of predetermined profiles having ~~at least one~~ a plurality of selected profile image ~~characteristic characteristics;~~

~~means for obtaining~~ a detector and optical elements configured to obtain at least one mail piece image characteristic associated with an image of the mail piece;

~~means for retrieving~~ computer readable code configured to retrieve the plurality of predetermined profiles;

~~means for successively comparing~~ computer readable code configured to successively compare the ~~at least one~~ mail piece image characteristic characteristics to the ~~profile image characteristic present in any of each of~~ the plurality of predetermined profiles until a match is found, if any;

~~means for identifying~~ computer readable code configured to identify the mail piece for special processing, if the ~~profile image characteristic present in one of the plurality predetermined profiles~~ substantially matches the ~~at least one~~ mail piece image characteristic characteristics for the image of the mail piece.

Claim 23: (currently amended) The system of claim 22 further comprising:

~~means for identifying~~ computer readable code configured to identify the mail piece as requiring one of the plurality of actions ~~the action~~ identified by an action identifier from the retrieved

other of the predetermined profiles, if the ~~at least one~~ of the plurality of predetermined profiles ~~profile~~ ~~image characteristic~~ from the retrieved data substantially matches the ~~least one~~ mail piece image ~~characteristic~~ characteristics for the image of the mail piece.

Claim 24: (currently amended) The system of claim 22 wherein ~~the at least one mail piece image characteristic and the at least one profile image characteristic are~~ the plurality of predetermined profiles include selected combinations of the plurality of profile image characteristics selected from the group consisting of barcodes, address styles, address resolution, envelope size, initiating processing and distribution center, addressee, postage characteristics, markings, and handwriting characteristics.

Claim 25: (currently amended) The system of claim 22 further comprising:
~~means for communicating a network interface and a server configured to communicate with a~~
network.

Claim 26: (currently amended) The system of claim 25 further comprising:
a remote server ~~capable of receiving and sending~~ configured to receive and send the data.

Claim 27: (currently amended) The system of claim 22 wherein said computer readable code is further configured to compare the mail piece image characteristics with a subset of the plurality of the predetermined profiles simultaneously, and wherein said computer readable code is further configured to identify the mail piece for special processing if there is a match from any one of the plurality of the predetermined profiles. ~~the mail piece comprises a hand-addressed mail piece;~~
~~wherein the at least one mail piece image characteristic comprises at least one handwriting characteristic; and,~~
~~wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for handwriting penned by one individual.~~

Claim 28: (previously presented) The system of claim 8 wherein said database is downloaded from the network.

Claim 29: (currently amended) The method of claim 1 further comprising the steps of:

modifying a result record associated with the image of the mail piece if the mail piece is flagged for the special processing;
transmitting the image to a remote site for manual image inspection according to the result record; and
classifying the mail piece as ~~innocuous or suspicious~~ based on the manual image inspection.

Claim 30: (currently amended) The method of claim 1 further comprising the steps of:

g) archiving the mail image having ~~at least one~~ archived mail piece image ~~characteristic~~ characteristics;
h) updating the plurality of predetermined profiles by creating at least one new predetermined profile having ~~at least one~~ a plurality of selected new profile image ~~characteristic~~ characteristics;
i) retrieving one of the new predetermined profiles that has not yet been used in the comparison;
j) comparing the ~~at least one~~ archived mail piece image ~~characteristic~~ characteristics to the at least one ~~new profile image characteristic present in the one~~ new predetermined profile;
l) identifying the archived mail piece for the special processing, if the ~~at least one~~ new predetermined profile ~~image characteristic~~ substantially matches the ~~at least one~~ archived mail piece image ~~characteristic~~ characteristics; and
m) repeating steps (i) through (l) for another one of the ~~plurality of~~ new predetermined profiles, if the ~~at least one~~ new predetermined profile ~~image characteristic~~ does not substantially matches the ~~at least one~~ archived mail piece image ~~characteristic~~ characteristics.